

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

**Claims 1 – 268 (Cancelled)**

269. (Previously Presented) A visual prosthesis comprising:  
an external communication unit receiving operational data;  
an internal communication unit transmitting said operational data;  
a plurality of electrodes driven by said internal communication unit and stimulating visual  
neurons to create a perception of a visual image; and  
means for altering parameters for stimulation of visual neurons based on said operational data.

270. (Previously Presented) The visual prosthesis according to claim 269, wherein said  
operational data includes current.

271. (Previously Presented) The visual prosthesis according to claim 270, wherein said  
current is electrode current.

272. (Previously Presented) The visual prosthesis according to claim 269, wherein  
said operational data includes electrode impedance.

273. (Previously Presented) The visual prosthesis according to claim 269, wherein  
said operational data includes voltage.

274. (Previously Presented) The visual prosthesis according to claim 273, wherein said  
voltage is electrode voltage.

275. (Previously Presented) The visual prosthesis according to claim 269, wherein said  
operational data includes whether or not a predetermined compliance voltage has been reached.

276. (Previously Presented) The visual prosthesis according to claim 269, wherein said operational data includes electrical recording from visual neurons.

277. (Previously Presented) The visual prosthesis according to claim 269, wherein said operational data includes an indication of power received by said internal communications unit.

278. (Previously Presented) A visual prosthesis comprising:  
an external communication unit receiving operational data;  
an internal communication unit transmitting said operational data;  
a plurality of electrodes driven by said internal communication unit and stimulating a retina to  
create a perception of a visual image; and  
means for altering parameters for stimulating the retina based on said operational data.

279. (Previously Presented) The visual prosthesis according to claim 278, wherein said operational data includes current.

280. (Previously Presented) The visual prosthesis according to claim 279, wherein said current is electrode current.

281. (Previously Presented) The visual prosthesis according to claim 278, wherein said operational data includes electrode impedance.

282. (Previously Presented) The visual prosthesis according to claim 278, wherein said operational data includes voltage.

283. (Previously Presented) The visual prosthesis according to claim 282, wherein said voltage is electrode voltage.

284. (Previously Presented) The visual prosthesis according to claim 278, wherein said operational data includes whether or not a predetermined compliance voltage has been reached.

285. (Previously Presented) The visual prosthesis according to claim 278, wherein said operational data includes electrical recording from the retina.

286. (Previously Presented) The visual prosthesis according to claim 278, wherein said operational data includes an indication of power received by said internal communications unit.

287. (Previously Presented) A visual prosthesis comprising:  
a video receiver for receiving a video image and converting said video image to a video signal; a  
video processing unit, coupled to said video receiver and processing said video signal;  
an external communications unit transmitting said video signal and receiving operational data;  
an internal communications unit transmitting said operational data and receiving said video  
signal.  
a plurality of electrodes driven by said internal communications unit and stimulating visual  
neurons to create a perception of said video image; and  
means for altering parameters for stimulating visual neurons based on said operational data.

288. (Previously Presented) The visual prosthesis according to claim 287, wherein said plurality of electrodes stimulate visual neurons on a retina.

289. (Previously Presented) The visual prosthesis according to claim 287, wherein said operational data includes current.

290. (Previously Presented) The visual prosthesis according to claim 289, wherein said current is electrode current.

291. (Previously Presented) The visual prosthesis according to claim 287, wherein said operational data includes electrode impedance.

292. (Previously Presented) The visual prosthesis according to claim 287, wherein said operational data includes voltage.

293. (Previously Presented) The visual prosthesis according to claim 292, wherein said voltage is electrode voltage.

294. (Previously Presented) The visual prosthesis according to claim 287, wherein said operational data includes whether or not a predetermined compliance voltage has been reached.

295. (Previously Presented) The visual prosthesis according to claim 287, wherein said operational data includes electrical recording from visual neurons.

296. (Previously Presented) The visual prosthesis according to claim 287, wherein said operational data includes an indication of power received by said internal communications unit.

297. (Previously Presented) A method of restoring vision in a patient with impaired vision comprising the steps of:

receiving a video image;

converting said video image to a video signal suitable for stimulation of visual neurons;

transmitting said video signal into the patient;

stimulating visual neurons in accordance with said video signal;

transmitting operational data out of the patient; and

altering parameters for stimulation visual neurons based on said operational data.

298. (Previously Presented) The method according to claim 297, further comprising the steps of recording neural activity and transmitting said neural activity as part of said operational data.

299. (Previously Presented) The method according to claim 297, further comprising the steps of measuring the state of individual electrodes and transmitting electrode measurements as part of said operational data.

300. (Previously Presented) The method according to claim 297, further comprising the steps of measuring power received inside the patient and transmitting said power received inside the patient with said operational data.

301. (New) A visual prosthesis comprising:  
an external communication unit receiving operational data and monitoring electrode current from said operational data;  
an internal communication unit transmitting said operational data;  
a plurality of electrodes driven by said internal communication unit and stimulating visual neurons to create a perception of a visual image; and  
means for altering parameters for stimulation of visual neurons based on said operational data.

302. (New) A visual prosthesis comprising:  
an external communication unit receiving operational data and monitoring compliance voltage from said operational data;  
an internal communication unit transmitting said operational data;  
a plurality of electrodes driven by said internal communication unit and stimulating visual neurons to create a perception of a visual image; and  
means for altering parameters for stimulation of visual neurons based on said operational data.